

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

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1. (Previously Amended) A magnetic powder comprising:

an alloy composition represented by $R_x(\text{Fe}_{1-y}\text{Co}_y)_{100-x-z-w}\text{B}_z\text{Nb}_w$ (where R is at least one rare-earth element that consists of Nd and Pr, x is 7.1 – 9.9 at%, y is 0 - 0.30, z is 4.6 – 6.9 at%, and w is 0.2 – 3.5 at%); and

the magnetic powder including a composite structure having a soft magnetic phase and a hard magnetic phase, the soft magnetic phase being constrained through the coupling of the surrounding hard magnetic phase so that the magnetic powder exhibits functions like a hard magnetic body,

wherein the magnetic powder has magnetic properties in which, when the magnetic powder is mixed with a binding resin and molded into an isotropic bonded magnet, an irreversible susceptibility (X_{irr}), which is measured by using an intersection of a demagnetization curve in the J-H diagram representing the magnetic properties at room temperature and a straight line which passes through the origin in the J-H diagram and has a gradient (J/H) of -3.8×10^{-6} H/m, as a starting point, is equal to or less than 5.0×10^{-7} H/m, and the intrinsic coercive force (H_{CJ}) at room temperature is in the range of 320-720 kA/m.

2. (Previously Amended) The magnetic powder as claimed in claim 1, wherein when the magnetic powder is formed into an isotropic bonded magnet having a

density ρ [Mg/m^3] by mixing with a binding resin and the molding the remanent magnetic flux density B_r [T] at room temperature satisfies the relationship represented by the formula of B_r/ρ [$\times 10^{-6} \text{T} \cdot \text{m}^3/\text{g}$] ≥ 0.125 .

3. (Previously Amended) The magnetic powder as claimed in claim 1, wherein when the magnetic powder is formed into an isotropic bonded magnet by mixing with a binding resin and then molding the absolute value of the irreversible flux loss (initial flux loss) is equal to or less than 6.2%.

4. (Cancelled)

5. (Currently Amended) The magnetic powder as claimed in claim 1, wherein ~~said R includes Pr and~~ a ratio of Pr with respect to the total mass of said R is 5 – 75%.

6. (Cancelled)

7. (Previously Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder has been obtained by quenching the alloy in a molten state.

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8. (Previously Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder has been obtained by milling a melt spun ribbon of the alloy produced on a cooling roll.

9. (Previously Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder has been subjected to a heat treatment for at least once during the manufacturing process or after manufacturing.

10. (Original) The magnetic powder as claimed in any one of claims 1 to 9, wherein the average particle size of the magnetic powder lies in the range of 0.5 - 150 μ m.

11. (Withdrawn) An isotropic bonded magnet formed by binding a magnetic powder containing Nb with a binding resin, wherein the isotropic bonded magnet is characterized in that the irreversible susceptibility (χ_{irr}) which is measured by using an intersectioning point of a demagnetization curve in the J-H diagram representing the magnetic properties at the room temperature and a straight line which passes the origin in the J-H diagram and has a gradient (J/H) of -3.8×10^{-6} H/m as a starting point is less than 5.0×10^{-7} H/m, and the intrinsic coercive force (H_{CJ}) of the magnet at the room temperature is in the range of 320 – 720 kA/m.

12. (Withdrawn) The isotropic bonded magnet as claimed in claim 11, wherein when the density of the isotropic bonded magnet is ρ [Mg/m³], the remanent

magnetic flux density $B_r[T]$ at the room temperature satisfies the relationship represented by the formula of $B_r/\rho \geq 0.125 [\times 10^{-6} T \cdot m^3/g]$.

13. (Withdrawn) The isotropic bonded magnet as claimed in claim 11 or 12, wherein said magnetic powder is formed of R-TM-B-Nb based on alloy (where R is at least one rare-earth element and TM is a transition metal containing Iron as a major component thereof).

14. (Cancelled)

15. (Withdrawn) The isotropic bonded magnet as claimed claim 13 or 14, wherein said R comprises rare-earth elements mainly containing Nd and/or Pr.

16. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 13 to 15, wherein said R includes Pr and its ratio with respect to the total mass of said R is 5 – 75%.

17. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 13 to 16, wherein said R includes Dy and its ratio with respect to the total mass of said R is equal to or less than 14%.

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18. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 11 to 17, wherein the average particle size of the magnetic powder lies in the range of 0.5 - 150 μ m.

19. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 11 to 18, wherein the absolute value of the irreversible flux loss (initial flux loss) is equal to or less than 6.2%.

20. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 11 to 19, wherein the magnetic powder is constituted from a composite structure having a soft magnetic phase and a hard magnetic phase.

21. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 11 to 20, wherein the isotropic bonded magnet is to be subjected to multipolar magnetization or has already been subjected to multipolar magnetization.

22. (Withdrawn) The isotropic bonded magnet as claimed in any one of claims 11 to 21, wherein the isotropic bonded magnet is used for a motor.

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